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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,428	12/18/2001	Stephen Griffin	1001.1545101	6502
28075	7590	05/20/2005	EXAMINER	
CROMPTON, SEAGER & TUFTE, LLC 1221 NICOLLET AVENUE SUITE 800 MINNEAPOLIS, MN 55403-2420			FOREMAN, JONATHAN M	
			ART UNIT	PAPER NUMBER
			3736	

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/025,428

Applicant(s)

GRIFFIN ET AL.

Examiner

Jonathan ML Foreman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-15 and 40 is/are allowed.
- 6) ☒ Claim(s) 16-18, 21-27, 32-34, 39 and 41 is/are rejected.
- 7) ☒ Claim(s) 19, 20, 28-31 and 35-38 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 16 – 18, 32 – 34, and 41 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,533,752 to Waram et al.

In reference to claims 16 – 18 and 32, Waram et al. discloses applicant's claimed invention including: a shaft (9) having a proximal portion and a distal portion; a polymeric member comprising a shape memory polymer (Col. 6, lines 9 – 13) disposed on the interior and non-releasably attached to the distal portion of the shaft (Figure 2), and a heat source in thermal communication with the polymeric member, where activation of the heat source by a power supply causes the polymeric member to change temperature and thus the flexibility of the distal portion of the shaft (Col. 5, line 36 – 39).

In reference to claims 33 – 34, Waram et al. discloses a method of using a variable stiffness guide wire including: providing a guide wire including a distal portion having a flexibility, a shaft (9), a distal polymeric member (Col. 6, lines 9 – 13) non-releasably attached to the shaft (Figure 2), a heat source in thermal communication with the polymeric member; and changing the flexibility of the distal portion of the guide wire by activating or deactivating the heat source (Col. 5, line 36 – 39). The guide wire is navigated through the patient's vasculature (Col. 3, lines 10 - 28).

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In reference to claim 41, Waram et al. discloses a hypotube (9) including a proximal portion and a distal portion having a flexibility; a polymeric member (Col. 6, lines 9 – 13) disposed on the interior of and attached to the distal portion of the hypotube (Figure 2); and a heat source in thermal communication with the polymeric member, whereby activation of the heat source causes the polymeric member to change the flexibility of the distal portion of the hypotube (Col. 5, line 36 – 39).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 21 – 25 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,533,752 to Waram et al. as applied to claims 16 and 33 above, and further in view of U.S. Patent No. 5,662,621 to Lafontaine.

In regards to claims 21 – 25 and 39, Waram et al. discloses a distal portion of the shaft including a tip portion, the polymeric member comprising a tube, and a heat source. Waram et al. discloses that electrical heating could be used to heat the polymeric member, but fails to disclose the heat source being a resistive heating element comprising a coiled wire. However, Lafontaine discloses a variable stiffness guide wire wherein the distal portion of the shaft has a tip portion including a coiled wire resistive heating element (Col. 6, lines 7 – 9) in order to heat the polymeric tubular member. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the heat source as disclosed by Waram et al. to include a coiled wire

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resistive heating element as taught by Lafontaine in order to allow the user to selectively heat a desired region of the polymeric member (Col. 6, lines 48 – 64)

5. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,533,752 to Waram et al. in view of U.S. Patent No. 5,662,621 to Lafontaine as applied to claim 25 above, and further in view of U.S. Patent No. 5,531,685 to Hemmer et al.

In reference to claims 26 and 27, Waram et al. in view of Lafontaine discloses the polymeric tube being disposed on the coiled wire and the coiled wire being electrically coupled to the power source (Col. 6, lines 22 – 26). However, Waram et al. in view of Lafontaine fails to disclose this electrical coupling being one or more lead wires. Hemmer et al. teaches the use of lead wires to electrically couple a heating element to a control unit (Col. 5, lines 3 – 11). It would have been obvious to one having ordinary skill in the art at the time the invention was made, in view of Hemmer et al., to use one or more lead wires to electrically couple the coiled wire to the power source.

Response to Arguments

6. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

7. Claims 1 – 15 and 40 are allowed.

8. Claims 19, 20, 28 – 31 and 35 – 38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan ML Foreman whose telephone number is (571)272-4724. The examiner can normally be reached on Monday - Friday 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571)272-4726. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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